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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/485,443	05/01/2000	WEI CHEN	Q57774	1926

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EXAMINER

KING, JUSTIN

ART UNIT	PAPER NUMBER
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2181

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/485,443

Applicant(s)

CHEN ET AL.

Examiner

Justin I. King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/11/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-5 are objected to because of the following informalities:

While claim 1's line 2 and claim 3's line 15 state "communication ports", the subsequent occurrences only state "said ports" or "ports". Appropriate corrections on the subsequent occurrences from "said ports" or "ports" to "said communication ports" are recommended.

Claim 1's line 8 and claim 3's page 8 lines 3 and 7 state "the previous step", Examiner recommends to change "the previous step" to "the connecting step".

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 and 3 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1's lines 4-5 and claim 3's lines 19-20 state prioritizing according to the number of the communication ports and transmission speed, but it fails to enable one on how to weight or factor each element in prioritizing.

Claim 3's line 16-18 state a prerequisite of total communication port number, but it fails to disclose the prerequisite and to enable one on verifying the prerequisite.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 3 recite "the topology" in the preamble. There is insufficient antecedent basis for this limitation in the claim.

Claims 1 and 3 recite the limitation "the transmission speed" in claim 1's line 5 and claim 3's line 19-20. There are insufficient antecedent bases for these limitations in the claims.

Claim 3 recites the limitation "the prerequisite" in claim 3's line 17. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the next speed group higher priority" in claim 3's page 8 line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the separated node" in claim 3's line 17. There is insufficient antecedent basis for this limitation in the claim.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection stated above.

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,311,245 to Klein: Klein discloses that it is known to arrange system components based on the transmission speed.

U.S. Patent No. 5,559,967 to Oprescu et al.: Oprescu teaches the effect of a low transmission speed device in a serial bus, and teaches a method to overcome the potential impact by modifying the message.

U.S. Patent No. 5,533,198 to Thorson, Gregory M.: Thorson teaches the relationship between the hopping and latency, and teaches a multiple dimensional topology to reduce the latency.

U.S. Patent No. 6,094,700 to Deschepper et al.: Deschepper teaches a method to synchronize a serial bus' transmission.

U.S. Patent No. 5,020,059 to Gorin et al.: Gorin discloses that it is well known in the art to minimize the depth of a tree topology.

U.S. Patent No. 5,724,517 to Cook et al: Cook discloses A method and system for apping a node topology is disclosed. The node topology is based on a computer system comprised of a high performance acyclic serial bus and a plurality of nodes coupled to the acyclic serial bus. Each node further includes an identification packet. The mapping topology establishes a root node based upon information found in each identification packet and establishes at least one branch node among the nodes based on the information. Next, the topology mapping method selects a first available branch node among the available branch nodes based on the information. The system then identifies any of the nodes that are child nodes to the first available branch

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node. Upon identifying all child nodes of the branch node, the system selects a next available branch node based upon the information. The processing continues until the root node is processed as a branch node.

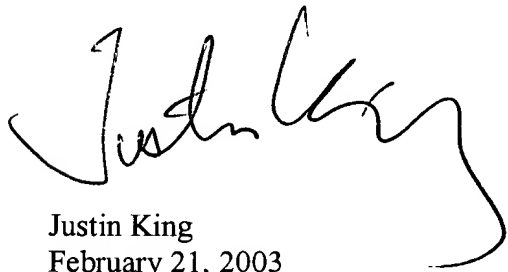
"IEEE Standard for a High Performance Serial Bus" by the IEEE Computer Society: The IEEE documents discloses that it is know to adjacent node with same transmission speed and to connect 1394 node in a tree structure.

"Introduction to Algorithms" by Thomas Cormen, Charles Leiserson, and Ronald Rivest: The algorithm textbook, published by the MIT Press, introduces varies of algorithms for computer system/data modeling.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin King whose telephone number is (703) 305-4571. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephones are unsuccessfully, the examiner's supervisor, Mark Reinhart can be reached at (703) 308-3110.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703)-306-5631.



Justin King  
February 21, 2003



XUAN M. THAI  
PRIMARY EXAMINER  
TC 2100